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JUL 25 2006

REMARKS/ARGUMENTS

Applicants respectfully acknowledge receipt and consideration of the Final Office Action mailed on May 31, 2006. Applicants note that there has yet to be a response to the request for correction of inventorship of the above patent application, filed on February 23, 2004. Accordingly, Applicants respectfully request receipt of a notice of acceptance of the change of inventorship in the above-entitled application.

Dependent claim 31 has been amended to correct a typographical error.

Pending claims 1, 3, 5-14, 16-17, 20, 22-25, 27 and 29-33 stand rejected under 35 U.S.C. §102(e) over U.S. Patent No. 6,510,508 (Zuraski). Applicants respectfully traverse the rejection and respectfully request reconsideration of the same.

As to claim 1, Zuraski nowhere teaches a pipeline resource including entries that are selectably flushable on an address space basis. Instead, the flush filter of Zuraski, contended to be the pipeline resource, does not include entries that are selectively flushable. Nor does the TLB with which the flush filter is associated. Instead, as taught by Zuraski, the TLB is flushed in its entirety. Zuraski, col. 9, lns. 52-55 ("In the embodiment shown, TLB flush filter may assert an Invalidate signal in order to allow a flush of TLB 39."). Furthermore, the Office Action refers to col. 13, lns. 3-11. However, this portion similarly teaches that the entire TLB is flushed. Simply put, there is no teaching in Zuraski that either its flush filter or its TLB includes entries that are selectively flushable on an address space basis. Thus claim 1 and its dependent claims are patentable.

Dependent claim 6 depends from claim 1 and further recites that the pipeline resource is a translation lookaside buffer. Because the Office Action asserts that it is flush filter 40 that is the pipeline resource contended to be selectively flushable on an address space, claim 6 is patentable for the further reason that Zuraski nowhere teaches that TLB 40 is flushable on an address space basis (as described above). For this further reason, dependent claim 6 is further patentable.

As to independent claim 8, Zuraski nowhere teaches hashing an address space identifier with a portion of a value before storage of the value and the address space identifier. In this regard, the Office Action has changed position as to what allegedly meets this recited subject matter. Now, the Office Action contends that the hashing recited in claim 8 is met by the teaching in col. 1, lns. 11-41 of Zuraski. However, this portion of Zuraski is simply the Background that teaches that memory management systems translate virtual addresses into

physical addresses. Nowhere does this or any other portion teach that such translations are performed by hashing an address space identifier with a portion of a value associated with the address space identifier. Rather, all that Zuraski teaches in this regard is that virtual address-to-physical address translations are stored in a TLB. Where is there any teaching of hashing of address space identifiers with another value? There is not, and claim 8 and the claims depending therefrom are patentable.

For similar reasons, independent claim 16 is patentable as clearly Zuraski nowhere teaches a hashing engine to hash an address space identifier with a portion of a value to be stored in an entry. Instead, all that the cited portions of Zuraski teaches is a TLB that stores virtual-to-physical address translations. Accordingly, claim 16 and its dependent claims are patentable.


Claim 20 is patentable for similar reasons discussed above regarding claim 1, as Zuraski nowhere teaches flushing a portion of a pipeline resource having the same address space identifier. Instead, the entire TLB of Zuraski is flushed, without regard to address space identifier. Zuraski, col. 9, lns. 50-58; col. 11, lns. 9-16; col. 13, lns. 3-11. Thus claim 20 and its dependent claims are patentable.

Independent claim 25 is patentable for similar reasons as claim 8. Specifically, Zuraski fails to teach hashing an address space identifier with at least a portion of a data value to be stored with the address space identifier in an entry of a pipeline resource. Accordingly, claim 25 and its dependent claims are patentable.

In view of these remarks, the application is now in condition for allowance and the Examiner's prompt action in accordance therewith is respectfully requested. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 20-1504.

Respectfully submitted,

Date: July 25, 2006



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